CLAIMS

1. A mask for a laser thermal printer, the mask comprising:

a first set of first logical values;

a second set of first logical values; and

a set of second logical values,

wherein the first set of first logical values is spatially clustered in a first triangle-like shape and the second set of first logical values is spatially clustered in a second triangle-like shape.

2. The mask of claim 1, wherein the first logical values are logical '0' values and the second logical values are logical '1' values.

3. The mask of claim 1, wherein the mask extends in a first direction, and wherein the first set of first logical values is spatially proximal to the second set of first logical values in the first direction.

4. The mask of claim 3, wherein the spatial frequency of the first set of first logical values spatially clustered in the first triangle-like shape and the second set of first logical values spatially clustered in the second triangle-like shape is greater than the spatial frequency of neighboring halftone dots.

5. The mask of claim 1, wherein the mask extends in a first direction and a second direction, wherein the first and second triangle-like shapes include a base and a peak, wherein the bases of the triangle-like shapes are oriented in the first direction, and wherein the base of the first triangle-like shape is spatially proximal to the peak of the second triangle-like shape in the second direction.

6. The mask of claim 5, wherein the peaks are unaligned in the second direction.

7. The mask of claim 1, wherein the set of second logical values is spatially clustered in a third triangle-like shape.

8. The mask of claim 7, wherein the first and second triangle-like shapes have a first orientation and the third triangle-like shape has an orientation that is inverted relative to the first orientation.

9. The mask of claim 1, wherein a boundary between the set of second logical values and the first and second sets of first logical values is an irregular zigzag.

10. The mask of claim 1, wherein the first triangle-like shape is selected from a group consisting of a semicircular shape, a sinusoidal shape, a trapezoidal shape and a pentagonal shape.

11. The mask of claim 1, wherein the mask is stored in a computer-readable data file.

12. A mask for a laser thermal printer comprising a first subset mask and a second subset mask,

each subset mask comprising:

a first set of first logical values;

a second set of first logical values; and

a set of second logical values,

wherein the first set of first logical values in the first subset mask is spatially clustered in a first triangle-like shape and the second set of first logical values in the first subset mask is spatially clustered in a second triangle-like shape.

13. The mask of claim 12, wherein the first logical values are logical '0' values and the second logical values are logical '1' values.

14. The mask of claim 12, wherein the mask extends in a first direction and a second direction, wherein the first set of first logical values is spatially proximal to the second set of first logical values in the first subset mask in the first direction, and wherein the first subset mask is spatially proximal to the second subset mask in the second direction.

15. The mask of claim 12, wherein the set of second logical values in the first subset mask is spatially clustered in a third triangle-like shape.

16. A mask for a laser thermal printer, the mask comprising a first subset mask and a second subset mask, each subset mask comprising at least one set of first logical values and at least one set of second logical values, wherein the set of first logical values in the first subset mask has a first triangle-like shape and wherein the set of first logical values in the second subset mask has a second triangle-like shape.

17. The mask of claim 16, wherein the mask extends in a first direction and a second direction, wherein each of the triangle-like shapes includes a base and a peak, wherein the bases of the triangle-like shapes are oriented in the first direction, and wherein the first subset mask is spatially proximal to the second subset mask in the second direction.

18. The mask of claim 17, wherein the peaks of the triangle-like shapes are unaligned in the second direction.

19. A method for printing with a laser thermal printing system, the method comprising:

printing a swath on a thermally sensitive medium as a function of a set of data; and

varying the breadth of the swath during printing.

20. The method of claim 19, wherein varying the breadth of the swath comprises contracting the breadth of the swath and expanding the breadth of the swath.

21. The method of claim 19, wherein varying the breadth of the swath comprises irregularly contracting the breadth of the swath and irregularly expanding the breadth of the swath.

22. The method of claim 19, wherein varying the breadth of the swath comprises varying the breadth of the swath as a function of the set of data and a mask.

23. A method comprising:

generating a first set of first logical values in a first triangle-like shape;

generating a second set of first logical values in a second triangle-like shape; and

generating a mask for a laser thermal printer comprising a set of second logical values, the first set of first logical values in the first triangle-like shape and the second set of first logical values in the second triangle-like shape.

24. The method of claim 23, wherein generating the first set of first logical values in the first triangle-like shape comprises:

defining a first column comprising a first subset of contiguous first logical values; and

defining a second column comprising a second subset of contiguous first logical values;

wherein the second subset of contiguous first logical values is a function of the first subset, a trend direction and a spatial frequency.

25. The method of claim 24, wherein the second subset of contiguous first logical values is further a function of a random element.

26. The method of claim 24, wherein the spatial frequency is greater than the spatial frequency of neighboring halftone dots.

27. A method comprising:

generating a first subset mask comprising a first set of first logical values and a first set of second logical values;

generating a second subset mask comprising a second set of first logical values and a second set of second logical values; and

assembling a mask for a laser thermal printer from the first subset mask and the second subset mask.

28. The method of claim 27, wherein the first set of first logical values is spatially clustered in a first triangle-like shape and the second set of first logical values is spatially clustered in a second triangle-like shape.

29. The method of claim 27, further comprising evaluating the first subset mask to determine whether printing on a laser thermal printing system as a function of the set of data and the first subset mask will create a pattern in a printed image.

30. The method of claim 27, further comprising printing with a laser thermal printer as a function of image data and the first subset mask.

31. A system comprising:

a thermally sensitive color donor including colorant;

a receptor positioned to receive colorant from the donor;

a controller; and

a set of lasers, each of the lasers receiving a signal from the controller and emitting a beam directed at the donor as a function of the signal, the beams forming a swath having a breadth,

wherein the controller varies the breadth of the swath during printing.

32. The system of claim 31, wherein the controller varies the breadth of the swath during printing as a function of a mask.

33. The system of claim 32, wherein the mask comprises:

a first set of first logical values;

a second set of first logical values; and

a set of second logical values,

wherein the first set of first logical values is spatially clustered in a first triangle-like shape and the second set of first logical values is spatially clustered in a second triangle-like shape.

34. The system of claim 31, wherein the controller varies the breadth of the swath by irregularly contracting the breadth of the swath and irregularly expanding the breadth of the swath.